

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A device for producing a high resolution photographic image of a scene, said device comprising:

- (a) a photographic imaging system;
- (b) a micromirror array containing an array of micromirrors, each mirror being capable of tilting individually in at least two tilt directions to reflect different sets of pixels representing locations of the scene, said micromirror array being positioned with respect to the photographic imaging system so that the mirrors of the micromirror array transfer reflected pixels representing said locations of the scene to be photographed to the photographic imaging system; and
- (c) an assembly system which forms a high resolution image of the scene by mosaicing extracted color values from each reflected pixel into a high resolution image of the scene.

2. (Original) The device of claim 1 wherein the photographic imaging system comprises a digital camera or a video camera.

3. (Currently Amended) A method for producing a high resolution image of a scene comprising:

- (a) positioning a set of mirrors of a micromirror array to reflect a set of pixels representing locations of a scene;
- (b) photographing the set of reflected pixels with a photographic imaging system;
- (c) extracting relevant color values from each reflected pixel; and
- (d) repeating steps (a)-(c) at least once up to a sufficient number of times to provide an image of a desired resolution, wherein each repetition of step (a) involves repositioning said set of mirrors to reflect a different set of pixels representing different locations of a scene; and
- (e) assembling the extracted relevant color values into an image of the scene.

4. (Previously Presented) The device of claim 1, further comprising a system for correlating the extracted color values to corresponding locations of the scene.
5. (Previously Presented) The device of claim 1, wherein each micromirror may be positioned in up to and including 320 different positions in each said tilt direction.
6. (Previously Presented) The device of claim 1, wherein each micromirror can be oriented in any of up to and including 102,400 positional states.
7. (Previously Presented) The device of claim 1, wherein the micromirror array comprises a micro-electromechanical array.
8. (Previously Presented) The device of claim 1, wherein the micromirror array comprises a micro-optical-electromechanical array.
9. (Previously Presented) The device of claim 1, wherein the photographic imaging system comprises a camera capable of collecting digital images.
10. (Previously Presented) The device of claim 9, wherein the camera comprises a video camera.
11. (Previously Presented) The device of claim 1, wherein movement of each micromirror is individually controllable.
12. (Previously Presented) The device of claim 1, wherein the photographic imaging system extracts more than one color value from at least some of the reflected pixels.
13. (Previously Presented) The method of claim 3, wherein step (e) comprises the steps of correlating the extracted color values to corresponding locations of the scene and placing the extracted color values at said locations to provide the image of the scene.

14. (Currently Amended) The method of claim 3, wherein each micromirror of said set of mirrors is moved in at least two different tilt directions during the performance of said method.

15. (Previously Presented) The method of claim 3, wherein the images are collected at frame rate.

16. (Previously Presented) The method of claim 3, wherein steps (a)-(c) are repeated thousands to millions of times per second.

17. (Previously Presented) The method of claim 3, wherein steps (a)-(c) are repeated at least 70 times.

18. (Canceled)

19. (Previously Presented) The method of claim 3, wherein more than one color value is extracted from at least some of the reflected pixels.

20. (Previously Presented) The method of claim 19, wherein said color values are RGB color values.